

AMENDMENTS TO THE CLAIMS

1 – 18. (Cancelled)

19. (New) An external cavity type semiconductor laser, comprising:

a semiconductor laser device having an activation layer;

a grating which receives a beam emitted from the semiconductor laser device; and

a window glass disposed between a beam emission surface of the semiconductor laser device and the grating, the beam emitted from the semiconductor laser device passing through the window glass;

wherein the window glass is arranged in either a first state or a second state,

wherein in the first state the window glass is nearly parallel with a first axis and not parallel with a second axis, and the angle between a surface of the window glass and the second axis is in the range of 5° to 12° ,

wherein in the second state the window glass is nearly parallel with the second axis and not parallel with the first axis, and the angle between the surface of the window glass and the first axis is in the range of 1° to 1.6° ,

wherein the first axis is nearly perpendicular to a plane that is nearly parallel with a boundary surface of the activation layer, and

wherein the second axis is nearly parallel with the beam emission surface of the semiconductor laser device and nearly perpendicular to the first axis.

20. (New) The external cavity type semiconductor laser as set forth in claim 19,

wherein a lens is disposed between the semiconductor laser device and the grating, the lens collecting the beam emitted from the semiconductor laser device.

21. (New) The external cavity type semiconductor laser as set forth in claim 19,
wherein the window glass is arranged in the first state.
22. (New) The external cavity type semiconductor laser as set forth in claim 19,
wherein the window glass is arranged in the second state.
23. (New) The external cavity type semiconductor laser as set forth in claim 19,
wherein the semiconductor laser device and the grating are arranged so that the
semiconductor laser device supplies an S wave to the grating.
24. (New) The external cavity type semiconductor laser as set forth in claim 19,
wherein the semiconductor laser device has an output power of at least 45 mW, and
wherein, when the semiconductor laser device emits a beam with an output power of 45 mW
or less, a kink does not occur.
25. (New) The external cavity type semiconductor laser as set forth in claim 24,
wherein the semiconductor laser device is a laser diode, and
wherein side surfaces of a ridge of the laser diode are buried with two layers of an insulation
film to suppress the kink and a stripe width W is 1.6 μm or less.
26. (New) The external cavity type semiconductor laser as set forth in claim 19,
wherein the semiconductor laser device is a laser diode, and

wherein a reflectance of the beam emission surface of the laser diode is 3% or less.

27. (New) The external cavity type semiconductor laser as set forth in claim 19,
wherein a numerical aperture of the lens is in the range from 0.3 to 0.7.

28. (New) The external cavity type semiconductor laser as set forth in claim 19,
wherein an external cavity length is in the range from 10 mm to 30 mm.

29. (New) The external cavity type semiconductor laser as set forth in claim 28,
wherein the external cavity length is in the range from 10 mm to 20 mm.

30. (New) The external cavity type semiconductor laser as set forth in claim 19,
wherein a reflectance of a first order diffracted beam of the grating is in the range from 10%
to 30%.

31. (New) The external cavity type semiconductor laser as set forth in claim 19,
wherein the semiconductor laser device is a blue laser diode.

32. (New) An external cavity type semiconductor laser, comprising:
a laser diode having an activation layer;
a grating which receives a beam emitted from the laser diode;
a window glass disposed between a beam emission surface of the laser diode and the grating,
the beam emitted from the laser diode passing through the window glass; and

a lens disposed between the laser diode and the grating, the lens collecting the beam emitted from the laser diode,

wherein the window glass is arranged in either a first state or a second state,

wherein in the first state the window glass is nearly parallel with a first axis and not parallel with a second axis, and the angle between a surface of the window glass and the second axis is in the range of 5° to 12° ,

wherein in the second state the window glass is nearly parallel with the second axis and not parallel with the first axis, and the angle between the surface of the window glass and the first axis is in the range of 1° to 1.6° ,

wherein the first axis is nearly perpendicular to a plane that is nearly parallel with a boundary surface of the activation layer, and

wherein the second axis is nearly parallel with the beam emission surface of the laser diode and nearly perpendicular to the first axis,

wherein the laser diode and the grating are arranged so that the laser diode supplies an S wave to the grating,

wherein the laser diode has an output power of at least 45 mW,

wherein when the laser diode emits a beam with an output power of 45 mW or less, a kink does not occur,

wherein a reflectance of the beam emission surface of the laser diode is 3% or less,

wherein a numerical aperture of the lens is in the range from 0.3 to 0.7,

wherein an external cavity length is in the range from 10 mm to 30 mm, and

wherein a reflectance of a first order diffracted beam of the grating is in the range from 10 % to 30%.

33. (New) The external cavity type semiconductor laser as set forth in claim 32,
wherein the window glass is arranged in the first state.
34. (New) The external cavity type semiconductor laser as set forth in claim 32,
wherein the window glass is arranged in the second state.
35. (New) The external cavity type semiconductor laser as set forth in claim 32,
wherein the laser diode is a blue laser diode.
36. (New) The external cavity type semiconductor laser as set forth in claim 32,
wherein side surfaces of a ridge of the laser diode are buried with two layers of an insulation
film to suppress the kink and a stripe width W is $1.6\text{ }\mu\text{m}$ or less.
37. (New) The external cavity type semiconductor laser as set forth in claim 32,
wherein the external cavity length is in the range from 10 mm to 20 mm.